

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/943,414	BOTTI ET AL.	
	Examiner	Art Unit	
	Devona E. Faulk	2615	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amendment filed on 2/6/2006.
2.  The allowed claim(s) is/are 1-11 and 23-25.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 5/11/06

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Remarks***

1. The applicant has amended to overcome the 112 rejections. Claims 1-11,23-25 are in allowable form.
2. Claims 12-22 and 26-28 are cancelled.

### ***Drawings***

3. The drawings are objected to because the various blocks in the figures need to be labeled to identify each block. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### **EXAMINER'S AMENDMENT**

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen Bongini (Reg. No. 40,917) on 4/27/2006.

The claims are amended as follows:

**Claim 23, line 8:** replace "deceasing" with "decreasing".

5. Claims 1-11, 23-25 are allowed.

The following is an examiner's statement of reasons for allowance: Regarding claims 1 and 23, prior art Regarding claim 22, Shvartsman (USPN 4,692,710) discloses a fundamental and harmonic pulse-width discriminator including computing the length of a first period of evaluation (column 3, lines 19-23); computing the length of a second period of evaluation (column 3, lines 26-28); receiving at input a predetermined value of total harmonic distortion (column 4, lines 62-65); and generating an output signal showing the reaching of the value of the prefixed distortion (column 4, lines 62-69); a clock and a counter.. Prior art Jeffries et al. (USPN 3,982,075) discloses means for detecting a first and second

period of evaluation, a clock and a first block for storing a number equal to the clock pulses (Figure 2; column 3, lines 16-30). Prior art Bachman et al. (USPN 4,633,252) discloses a radar velocity sensor including a clock, period counter and a zero-crossing detector (figure 4; column 7, lines 56-65). Prior art Jackson (USPN 6,504,935) discloses a method and apparatus for the modeling and synthesis of harmonic distortion. Prior art Dawson (US 4,318,047) discloses detection of narrow pulses. Prior art Bases (USPN 5,442,310) discloses circuitry and method for reset discrimination. Prior art Sakata (USPN 5,388,159) discloses equalizing circuit for reproduced signals. Prior art Hopwood et al. (USPN 4,123,719) discloses chirp phase distortion detector in a wideband linearization feedback control loop. Prior art Chihak (USPN 4,486,752) discloses pulse width discriminator applicable to ATC transponders. Prior art Gulick et al. (USPN 5,993,057) discloses apparatus for detecting and averaging data in a digital data stream. The prior art or combination thereof fails to disclose or make obvious a multiplier block for performing a multiplication between the number stored in the first block and a multiplicative factor during the second period of evaluation, a second block for storing the outcome of the multiplication, the second block adapted to generate an output signal when the value stored in the second block is zero; decreasing the outcome of the multiplying step during the second period of evaluation. Therefore, the prior art or combination thereof fails to disclose or make obvious a distortion detector and method for detecting harmonic distortion as claimed.

Claims 2-11,24 and 24 and allowed due to their dependency on claims 1 and 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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5/1/06.